

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
27 May 2004 (27.05.2004)

PCT

(10) International Publication Number
WO 2004/043667 A1

(51) International Patent Classification⁷: **B29C 44/12, 33/12**

(74) Agent: LANGFELDT, Jens, F., C.; Zacco Norway AS, P.O. Box 765, Sentrum, N-0106 Oslo (NO).

(21) International Application Number:
PCT/NO2003/000346

(22) International Filing Date: 20 October 2003 (20.10.2003)

(25) Filing Language: Norwegian

(26) Publication Language: English

(30) Priority Data:
20025467 14 November 2002 (14.11.2002) NO

(71) Applicant (*for all designated States except US*): PRIME-FLOOR AS [NO/NO]; Sørlibakken 45, N-1473 Lørenskog (NO).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): STENGRIMSEN, Frank [NO/NO]; Sørlibakken 45, N-1473 Lørenskog (NO). SPYDEVOLD, Jan [NO/NO]; Midtåsen 14E, N-1624 Gressvik (NO).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

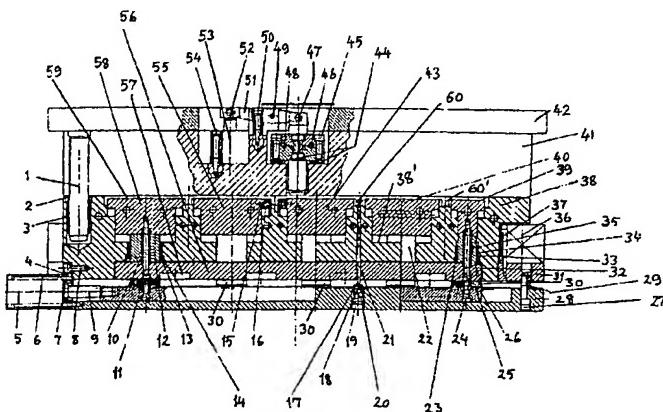
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND APPARATUS FOR MANUFACTURING PANEL BODIES OF PLASTIC MATERIAL, AND USE THEREOF



(57) Abstract: A method and an apparatus for manufacturing panel bodies of plastic material, wherein the plastic material is injected into a mould cavity (59) of a mould for the filtering thereof. After the injection of the plastic material, the cavity is caused to expand from a first volume (V1) to a second, larger volume (V2), whilst the plastic material expands, the plastic material having added thereto a drive means, e.g., a foaming agent or a blowing agent. The moulded panel body is then removed from the cavity of the mould. Prior to the injection of the plastic material, reinforcing material (60) may optionally be placed in the mould in recessed portions (60') of the first volume of the mould cavity. This reinforcing material may be held up at some points by pushers (21) projecting up through the respective bottoms of said recessed portions (60') until the recessed portions have been filled with plastic material to surround the reinforcing material. The pushers are withdrawn from the recessed portions and from support of the reinforcing material as the mould cavity (59) expands to its second volume.

WO 2004/043667 A1

BEST AVAILABLE COPY